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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,044	03/01/2004	Chung-Hui Chen	TSMC2003-0817(N1280-00070	1265

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EXAMINER	
NGUYEN, LONG T	
ART UNIT	**PAPER NUMBER**
2816	

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/791,044	CHEN, CHUNG-HUI	
	Examiner	Art Unit	
	Long Nguyen	2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-8,10-13,15-18 and 20* is/are rejected.

7)☒ Claim(s) *4,9,14 and 19* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 March 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/28/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 1-20 are objected to because of numerous informalities:

Claim 1, lines 2, 4, 7 and 11, "clock for" should be changed to --clock signal for--.

Claim 1, lines 6 and 10, it is suggested to change "further passing" to –buffering-- since the NAND gate cannot pass the input signal.

Claim 1, line 8, "the input" should be changed to --an output of the first signal passing module--.

Claim 1, line 12, "the input" should be changed to --an output of the second signal passing module--.

Claim 2, lines 1 and 2, "passing" is suggested to be changed to either --for buffering-- or --for providing--.

Claim 4, line 1, "wherein the" should be changed to --wherein each of the--.

Claim 4, line 2, "are NAND gates" should be changed to --is a NAND gate--.

Claim 4, line 3, --respective-- should be inserted before "passed".

Claim 4, line 3, "disenables" should be changed to --disables--.

Claim 4, line 3, "it" should be changed to --the flag signal--.

Claim 5, line 1, "wherein the" should be changed to --wherein each of the--.

Claim 5, line 1, "have" should be changed to either --comprises-- or --has--.

Claim 5, line 2, "PMOS and" should be changed to --PMOS transistor and--.

Claim 5, line 2, "for passing the input" needs to be deleted to avoid misdescriptive problem since the fourth pass gate does not pass the input but actually passes the output of the second signal passing module.

Claim 5, line 3, both occurrences "transistors thereof" should be changed to --transistor--.

Claim 5, lines 3 and 4, "input" should be changed to --signal--.

Claim 6, line 1, "wherein the" should be changed to --wherein each of the--.

Claim 6, line 1, "have" should be changed to either --comprises-- or --has--.

Claim 6, line 2, "PMOS and" should be changed to --PMOS transistor and--.

Claim 6, line 2, "transistors" should be changed to --transistor--.

Claim 6, line 2, "for passing the input" needs to be deleted to avoid misdescriptive problem since the third pass gate does not pass the input but actually passes the output of the first signal passing module.

Claim 6, line 3, both occurrences "transistors thereof" should be changed to --transistor--.

Claim 6, lines 3 and 4, "input" should be changed to --signal--.

Claim 7, lines 4 and 7, it is suggested to change "further passing" to --buffering--.

Claim 7, line 5, "the input" should be changed to --an output of the first signal passing module--.

Claim 7, lines 5 and 8, "clock has a high" should be changed to --clock input has the--.

Claim 7, line 8, "the input" should be changed to --an output of the second signal passing module--.

Claim 7, lines 10 and 11, "passing" is suggested to be changed to either --for buffering-- or --for providing--.

Claim 9, line 1, "wherein the" should be changed to --wherein each of the--.

Claim 9, line 2, "are NAND gates" should be changed to --is a NAND gate--.

Claim 9, line 3, --respective-- should be inserted before "passed".

Claim 9, line 3, "disenables" should be changed to --disables--.

Claim 9, line 3, "it" should be changed to --the flag signal--.

Claim 10, line 1, "wherein the" should be changed to --wherein each of the--.

Claim 10, line 1, "have" should be changed to either --comprises-- or --has--.

Claim 10, line 2, "PMOS and" should be changed to --PMOS transistor and--.

Claim 10, line 2, "for passing the input" needs to be deleted to avoid misdescriptive problem since the fourth pass gate does not pass the input but actually passes the output of the second signal passing module.

Claim 10, line 3, both first and second occurrences "transistors thereof" should be changed to --transistor--.

Claim 11, line 1, "wherein the" should be changed to --wherein each of the--.

Claim 11, line 1, "have" should be changed to either --comprises-- or --has--.

Claim 11, line 2, "PMOS and" should be changed to --PMOS transistor and--.

Claim 11, line 2, "transistors" should be changed to --transistor--.

Claim 11, line 2, "for passing the input" needs to be deleted to avoid misdescriptive problem since the third pass gate does not pass the input but actually passes the output of the first signal passing module.

Claim 11, line 3, both first and second occurrences "transistors thereof" should be changed to --transistor--.

Claim 12, lines 2, 4, 7 and 11, "clock for" should be changed to --clock signal for--.

Claim 12, lines 6 and 10, it is suggested to change "further passing" to --buffering--.

Claim 12, line 8, "the input" should be changed to --an output of the first signal passing module--.

Claim 12, line 12, "the input" should be changed to --an output of the second signal passing module--.

Claim 12, lines 14 and 15, "passing" is suggested to be changed to either --for buffering-- or --for providing--.

Claim 12, lines 14 and 15, "input" should be changed to --signal--.

Claim 12, lines 16 and 19, "wherein the" should be changed to --wherein each of the--.

Claim 12, lines 16 and 19, "have" should be changed to either --comprises-- or --has--.

Claim 12, lines 16 and 19, "PMOS and" should be changed to --PMOS transistor and--.

Claim 12, line 17, "for passing the input" needs to be deleted to avoid misdescriptive problem since the fourth pass gate does not pass the input but actually passes the output of the second signal passing module.

Claim 12, lines 17 and 18, "transistors thereof" should be changed to --transistor--.

Claim 12, lines 17 and 18, "input" should be changed to --signal--.

Claim 12, line 19, "transistors" should be changed to --transistor--.

Claim 12, line 20, "for passing the input" needs to be deleted to avoid misdescriptive problem since the third pass gate does not pass the input but actually passes the output of the first signal passing module.

Claim 12, lines 20 and 21, "transistors thereof" should be changed to --transistor--.

Claim 12, lines 21, first and second occurrences "input" should be changed to --signal--.

Claim 14, line 1, "wherein the" should be changed to --wherein each of the--.

Claim 14, line 2, "are NAND gates" should be changed to --is a NAND gate--.

Claim 14, line 3, --respective-- should be inserted before "passed".

Claim 15, line 3, "an input" should be changed to --the input-- (see line 1).

Claim 15, line 4, "clock;" should be changed to --clock signal;--.

Claim 15, line 6, "clock in" should be changed to --clock signal in--.

Claim 15, lines 7 and 12, it is suggested to change "passing" to --buffering-- since the NAND gate cannot pass the signal.

Claim 15, lines 7 and 12, "through" is suggested to change to --by using--.

Claim 15, lines 8 and 13, "the input passed by" should be changed to --an output of--.

Claim 15, lines 8 and 13, "to" should be changed to --through--.

Claim 15, lines 9 and 14, "clock for" should be changed to --clock signal for--.

Claim 15, line 10, "the input" should be changed to --the output of the first signal passing module--.

Claim 15, line 15, "the input" should be changed to --the output of the second passing module--.

Claim 16, line 1, "passing" should be changed to either --buffering-- or --providing--.

Claim 19, line 1, "wherein the" should be changed to --wherein each of the--.

Claim 19, line 2, "are NAND gates" should be changed to --is a NAND gate--.

Claim 19, line 3, --respective-- should be inserted before "passed".

Claim 19, line 3, "disenables" should be changed to --disables--.

Claim 19, line 3, "it" should be changed to --the flag signal--.

Claim 20, lines 1 and 4, "wherein the" should be changed to --wherein each of the--.

Claim 20, lines 2 and 5, "have" should be changed to either --comprises-- or --has--.

Claim 20, lines 2 and 5, "PMOS and" should be changed to --PMOS transistor and--.

Claim 20, line 2, "for passing the input" needs to be deleted to avoid misdescriptive problem since the fourth pass gate does not pass the input but actually passes the output of the second signal passing module.

Claim 20, lines 3-4, both occurrences "transistors thereof" should be changed to --transistor--.

Claim 20, lines 3, 4, 6 and 7, "input" should be changed to --signal--.

Claim 20, line 5, "transistors" should be changed to --transistor--.

Claim 20, line 5-6, "for passing the input" needs to be deleted to avoid misdescriptive problem since the third pass gate does not pass the input but actually passes the output of the first signal passing module.

Claim 20, lines 6 and 7, "transistors thereof" should be changed to --transistor--.

Appropriate correction to above informalities is required so that the claims are clear. Note that claims 3, 8, 13, and 17-18 are objected to because they include the informalities of claims 1, 7, 12 and 15, respectively.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5-8, 10-13, 15-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Pasqualini (USP 6,489,825).

With respect to claims 1-3, 5-8, 10-13, 15-18 and 20, Figure 2 of the Pasqualini reference discloses a double flip-flop, which includes: a first pass gate (216 which comprising NMOS M1 and PMOS M2 connected in parallel); a clock signal (CLK) and an inverted signal (CPZ) of the clock signal (CLK); an input (D); a second pass gate (224 which comprising PMOS M9 and NMOS 232); a first signal passing module (inverter U2); a third pass gate (232 which comprising NMOS M5 and PMOS M6 connected in parallel); a second signal passing module (inverter U4); a fourth pass gate (234 which comprising PMOS M11 and NMOS M12 connected in parallel); and a driver module (inverter U6).

Allowable Subject Matter

5. Claims 4, 9, 14 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and if amend to overcome the informalities set forth above.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directly to Examiner Long Nguyen whose telephone number is (571) 272-1753. The Examiner can normally be reached on Monday to Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Callahan, can be reached at (571) 272-1740. The fax number for this group is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 17, 2005

LONG NGUYEN
PRIMARY EXAMINER